

ABSTRACT OF THE DISCLOSURE

This disclosure relates to decreasing the required buffer memory capacity while reducing the impact of an arithmetic error in error diffusion processing. A quantization circuit (4) quantizes input image data and outputs an output code. The quantization error generated in the quantization circuit (4) is calculated by an inverse quantization circuit (5) and subtracter (6). The calculated quantization error is stored in a buffer (8). Since the buffer (8) only needs to have a size capable of storing the quantization error, the size can be made smaller than before. A diffusion filter (9) diffuses the quantization error using a quantization error or the like, which is stored in the buffer (8). A latch (3) and bit connector (1) can usefully reduce the impact of an arithmetic error in error diffusion processing on the next input image data.